



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/098,638	03/15/2002	Kazuo Nakamura		6746

7590 07/26/2004
Kazuo NAKAMURA
8-7, Higashi-Takasagocho
Saitama Pref.
Saitama-City, 336-0006
JAPAN

EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT	PAPER NUMBER
----------	--------------

1624

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/098,638

Applicant(s)

NAKAMURA, KAZUO

Examiner

Venkataraman Balasubramanian

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's response filed on 12/12/2003 is made of record. Careful perusal of the amendment however indicates that there are only claims 1-4 cited in the amendment.

Subsequently applicant has filed a second amendment on 2/7/2004, which indicates in the correction copy claims 2, 3 and 7 are cancelled along with amendment to claims 1, 4, 5 and 6.

Applicant has then filed a third amendment On 5/10/2004, which indicates claims 2 and 3 are cancelled and claim 7 withdrawn.

It is not clear what is the status of claim 7. Is it cancelled? Applicant is urged to indicate the status of claim 7.

Furthermore, applicant is reminded that the original claims 1-7 were subjected restriction requirement and applicant elected Group 1 with claims 1-6 and compound of claim 7 as specific compound for the process recited in claim 1. Claims 1-6 were examined to the extent they embrace the micromixing process for the elected compound.

The response filed 5/10/2004 is not entitled to the benefits of 37 CFR 1.8 since it was not deposited with the U.S. Postal Service for delivery to the U.S. Patent and Trademark Office. Therefore, the date of receipt in the U.S. Patent and Trademark Office has been used to determine the timeliness of the paper.

Applicants should note that 37 C.F.R 1.52 requires all papers be plainly and legibly written either by a typewriter or machine printer in permanent dark ink or its

Art Unit: 1624

equivalent; Handwritten material in appear is not acceptable. Again 37 C.F.R 1.52 (b) requires no new matter may be introduced into an application after its filing date.

An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1624

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schnefer et al., US 2,853,563, in view of Alagy et al., US 5,037,619 and Schubert et al., US 6,299,657 for reasons of record. To repeat:

Schnefer et al., teaches a process for making substituted triazine by trimerization of imidate esters. See column 1-3, general formula shown on column 2 and the process of trimerization described therein. See examples 1-29, especially examples 8-25 for trimerization of benzimidates.

Schnefer et al., differs from the reference in not teaching the micromixing process using porous body claimed in the instant claims.

Schubert et al. teaches a general process for carrying out chemical reaction using microlaminar mixer for micromixing. See entire document especially column 1-2 for the description of the process and column 3-7 for details of the process. Note the reaction space is limited to 10 μ M to 1000 μ M, preferably 10 μ M to 100 μ M for mixing. See column 2, lines 51-65. See example on column 8 for use of such micromixing process.

Schubert et al. however, teaches foils for making the micro channels for the fluid mixing and is silent about use of porous material.

Alagy et al. teaches advantages of using a ceramic material for an oxidation reaction. See entire document especially see column 4 and column 5, which teaches porous packing material including silica.

Art Unit: 1624

Note for overall process advantage, the two secondary references rely on micromixing. Thus one having ordinary skill in the art at the time of the invention was made would have been motivated to combine both the primary and secondary references and employ the process taught by these prior art to the starting materials and reactants of the instant invention and expect to obtain the desired product because he would have expected the analogous starting materials and reactants react similarly. It has been held that application of an old process to an analogous material to obtain a result consistent with the teachings of the art would have been obvious to one having ordinary skill. Note In re Kerkhoven 205 USPQ 1069.

Applicant should note this rejection is same as made in the previous office action except that cancelled claims are excluded from this rejection.

Applicant has not provided a proper argument. Applicant has stated that 'An unique micromixing process using phase separation porous glass body is used in my invention in comparison with microlaminar mixer for micromixing (Schubert et al.) and ceramic material for an oxidation reaction. (Alagy et al.).

In case of process for making substituted triazine by trimerization (Schnefer et al.) my invention could promote the reaction by an unique micromixing body as shown in the application example process using phase separation porous glass.'

However, applicant has not provided any clear-cut factual evidence and supporting argument to show how instant process distinguishes over the prior art cited. As noted above, the combined teaching of the prior art cited clearly makes the instant process an obvious variant.

Art Unit: 1624

Hence, this rejection is maintained.

Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is Mukund Shah whose telephone number is (571) 272-0674. If Applicants are unable to reach Mukund Shah within 24-hour period, they may contact James O. Wilson, Acting-SPE of art unit 1624 at 571-272-0661.

The fax phone number for the organization where this application or proceeding is assigned (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Venkataraman Balasubramanian
Venkataraman Balasubramanian

7/22/2004